

Title (en)  
REACTION SINTERED MULTIPHASE CERAMIC BODY

Publication  
**EP 0115177 B1 19890927 (EN)**

Application  
**EP 83307834 A 19831221**

Priority  
• US 45467382 A 19821230  
• US 45467482 A 19821230

Abstract (en)  
[origin: EP0115177A2] Ceramic body formed by reaction sintering at pressures ranging from subatmospheric to superatmospheric of admixed and shaped reactants, which can be elements, compounds, intermetallic compounds and/or alloys, in stoichiometric proportions to substantially form 5-95 mole percent of nitride phase or phases of one or both of Al and Si, and 5-95 mole percent of second phase or phases being boride, carbide, silicide and/or sulfide of one or more of elements of Groups 3b including lanthanide and actinide series elements, 4b, 5b, and 6b, which phases have a maximum grain size substantially not greater than 10  $\mu$ m and which body contains 0 to 4 weight percent oxygen. Such ceramic body is useful as part of a component in an electrolytic cell used in aluminum production.

IPC 1-7  
**C04B 35/58; C04B 35/65**

IPC 8 full level  
**C04B 35/56** (2006.01); **C04B 35/58** (2006.01); **C04B 35/581** (2006.01); **C04B 35/591** (2006.01); **C04B 35/593** (2006.01); **C04B 35/65** (2006.01); **C25C 3/08** (2006.01)

CPC (source: EP)  
**C04B 35/5156** (2013.01); **C04B 35/5158** (2013.01); **C04B 35/58014** (2013.01); **C04B 35/5805** (2013.01); **C04B 35/58071** (2013.01); **C04B 35/58092** (2013.01); **C04B 35/581** (2013.01); **C04B 35/593** (2013.01); **C04B 35/645** (2013.01); **C04B 35/65** (2013.01); **C25C 3/08** (2013.01)

Cited by  
EP0164830A3; EP0242968A1; EP0257708A1; CN116535215A; WO8801311A1

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**EP 0115177 A2 19840808; EP 0115177 A3 19860611; EP 0115177 B1 19890927**; AU 2284683 A 19840705; AU 566566 B2 19871022; BR 8307056 A 19840731; CA 1217208 A 19870127; DE 3380626 D1 19891102; ES 528525 A0 19860601; ES 8607889 A1 19860601; JP H0553754 B2 19930810; JP S59131580 A 19840728; NO 166581 B 19910506; NO 166581 C 19910814; NO 834869 L 19840702

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